

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/018572

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl.⁷ B01J23/02, 32/00, 35/04, B01D53/86, C01B33/26, C04B35/00,
38/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl.⁷ B01J21/00-38/74, B01D53/86, 94, C01B33/26, C04B35/00, 38/00,
41/91

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1922-1996	Toroku Jitsuyo Shinan Koho	1994-2005
Kokai Jitsuyo Shinan Koho	1971-2005	Jitsuyo Shinan Toroku Koho	1996-2005

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 2001-310128 A (Nippon Soken, Inc., et al.), 06 November, 2001 (16.11.01), Claims 3, 5, 7, 9, 10 to 13, 19, 57, 76;	1-9, 13, 14, 16-26, 29-37, 43-46
Y	example 1 & EP 1043067 A2	10-12, 38-41
Y	JP 2002-172329 A (Denso Corp., et al.), 18 June, 2002 (18.06.02), Claims 1, 6 to 8; Par. No. [0046] & US 2002/0039966 A1 & DE 10147347 A1	10-12
Y	JP 49-129704 A (Corning Glass Works), 12 December, 1974 (12.12.74), Claims 1 to 3; page 4, lower left column, lines 7 to 11 & DE 2411757 A1	38-41

☒ Further documents are listed in the continuation of Box C.☐ See patent family annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
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- "O" document referring to an oral disclosure, use, exhibition or other means
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- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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- "&" document member of the same patent family

Date of the actual completion of the international search
23 March, 2005 (23.03.05)Date of mailing of the international search report
29 March, 2005 (29.03.05)Name and mailing address of the ISA/
Japanese Patent Office

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International application No.

PCT/JP2004/018572

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 63-103877 A (Nagasaki-Ken), 09 May, 1988 (09.05.88), Claim 1; page 2, upper left column, lines 9 to 14; example 1 (Family: none)	1, 2, 16-26, 29-35, 38, 43-46
P, X	JP 2004-298709 A (National Institute of Advanced Industrial Science and Technology), 28 October, 2004 (18.10.04), Claims 3, 6, 7; Par. No. [0001] (Family: none)	1, 2, 13, 14, 16, 17, 19, 20, 35-38, 43-46
A	JP 52-105587 A (Nippon Soken, Inc.), 05 September, 1977 (05.09.77), & US 4224302 A	1-14, 16-26, 29-41, 43-46